

ABSTRACT OF THE DISCLOSURE

A method for making a field emission cold cathode for use in vacuum tubes. A carbon velvet material is coated with a low work function cesiated salt and bonded to a cathode surface. Alternatively, the carbon velvet material is bonded to the cathode surface before being coated with the cesiated salt. The coating may be applied by spraying the carbon velvet material with a cesiated salt solution, or by dipping the material into a crucible of molten cesiated salt. This abstract is provided to comply with the rules requiring an abstract, and is intended to allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning the claims. 37 CFR §1.72(b).